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AEROSPACE & FLIGHT TEST RADIO COORDINATING COUNCIL

September 13, 2019

Ms. Marlene S. Dortch
Secretary
Federal Communications Commission
445 12th Street S.W.
Room 2-B450
Washington, DC 20554

Re: WC Docket No. 18-213

Dear Ms. Dortch:

On July 10 the Commission adopted a Notice of Proposed Rulemaking that looks toward creating a $100 million pilot program to determine ways in which the Commission can support connected health care for low-income Americans and veterans (FCC 19-64; hereinafter cited as "the Notice"). Aerospace and Flight Test Radio Coordinating Council, Inc. ("AFTRCC") submits this filing in order to address a possible misunderstanding that appears in certain of the opening Comments regarding Medical Body Area Network systems ("MBANs").

By way of background, AFTRCC is an association of the nation's principal aerospace manufacturers (see Attachment). AFTRCC was founded in 1954 to serve as an advocate for the aerospace industry on matters affecting spectrum policy, and it serves as the recognized non-Government coordinator for the shared, Government/Non-Government spectrum allocated for flight testing.[1] AFTRCC is the FCC-designated AMT coordinator for MBANs use of the AMT spectrum at 2360-2390 MHz, a safety-of-life band,[2] and is responsible for coordination with Wireless Communications Services ("WCS") licensees in the adjacent, 2345-2360 MHz band.[3] More recently, AFTRCC was designated to coordinate secondary wireless microphone use of the 1435-1525 MHz AMT band, another safety-of-life band.[4] AFTRCC works closely with Government Area Frequency Coordinators in an effort to ensure that interference-free flight test operations are protected, and flight safety maximized.

The Commission authorized MBANs on a secondary basis several years ago in the 2360-2400 MHz band subject to coordination and operational constraints designed to protect AMT in the band. Among these are rules distinguishing between the operation of MBANs in 2360-2390 MHz, versus the operation of MBANs in 2390-2400 MHz.

In its Comments, Viraspex makes reference to MBANs as generally illustrating the Commission's "recogn[ition of] the importance of remote monitoring . . . ." Viraspex at p. 6. In another

[1] Also known as aeronautical mobile telemetry, or "AMT."
[2] *See In the Matter of Amendment of the Commission's Rules to Provide Spectrum for the Operation of Medical Body Area Networks, First Report and Order,* FCC 12-54, 27 FCC Rcd 6422, 6457 at para. 74 (2012).
[3] Rule 27.73(a).
[4] Rule 74.803(d).

example, The Partnership for Artificial Intelligence, Telemedicine, and Robotics in Healthcare ("PATH") goes further and suggests that "MBAN systems could eventually be used in a mobile environment for ambulatory patients by sending data through a commercially available wireless service to a monitoring center or [health care provider]," citing to Comments of the American Telemedicine Association filed in 2009 in ET Docket No. 08-59. PATH Comments at p. 5 and note 20.

In other words, the Comments seem to suggest that MBANs represents the archetype for technology applicable to remote connected care. If this is what is intended, it represents a seriously incomplete apprehension of Commission policies relative to MBANs.

AFTRCC was closely involved in the development of a joint proposal with GE Healthcare and Philips Healthcare that figured significantly in the Commission's adoption of Part 95 Rules for MBANs. AFTRCC's concern at the time was not with wireless patient monitoring per se, but rather that MBANs use of S-band frequencies set aside for manned aircraft flight test telemetry (2360-2390 MHz) risked harmful interference to AMT. Over the course of several years, the concerned parties were able to fashion an MBANS solution which offered the potential for a new type of medical technology while at the same time protecting flight test telemetry. It was a 'win' for the Commission and all concerned.

Integral to this solution was the development of a coordination and technological fail-safe regime intended to ensure that 2360-2390 MHz MBANs devices only be operated indoors, specifically inside health care facilities. Operation of MBANs outside of health care facility buildings in an ambulance or a patient's home, for example, is restricted to the band 2390-2400 MHz which is not typically used for flight safety communications.

In particular, Rule 95.2507 prescribes:

> Use of Medical Body Area Network (MBAN) devices in the 2360-2390 MHz band is restricted to indoor operation within a health care facility registered with the MBAN frequency coordinator under §95.2509. For the purposes of this subpart, health care facilities are limited to hospitals and other establishments, both Federal and non-Federal, that offer services, facilities and beds for use beyond a 24 hour period in rendering medical treatment.

(emphasis added). Rule 95.2509 sets forth detailed registration and coordination requirements reinforcing the indoor-only requirement for 2360-2390 MHz MBANs. And Rule 95.2559(f) prescribes channel access requirements ("A MedRadio programmer/control transmitter and its associated medical body-worn transmitters shall not commence operating in, and shall automatically cease operating in, the 2360-2390 MHz band if the programmer/control transmitter does not receive, in accordance with the protocols specified by the manufacturer, a control message permitting such operation."). As the Commission explained in its 2012 Report and Order adopting MBANs service rules:

> We further conclude that an MBAN will be able to share the 2360-2400 MHz band with incumbent users. The *Joint Proposal* offers a way for MBAN devices to operate in a manner compatible with incumbent AMT licensees. By proposing unrestricted use of the 2390-2400 MHz band segment and a coordination process for MBAN users in the 2360-

> 2390 MHz portion of the band along with suggesting the use of established engineering guidelines to determine if MBAN use can occur within line-of-sight of an AMT site without causing interference, the *Joint Proposal* describes how MBAN users could successfully operate in the band on a secondary basis. We agree. As discussed in greater detail below, we conclude that it is necessary for us to establish a coordination process and related procedures and guidelines to ensure that the primary AMT operations in the band are adequately protected from MBAN users.[5]

(emphasis added).

In short, it is only MBANs devices operating solely within the 2390-2400 MHz range that could be used to support health monitoring outside health care facilities, i.e. remote monitoring. Any suggestion that MBANS generally, i.e. MBANs in the 2360-2390 MHz band, could support such monitoring, misconstrues the regulatory framework. Further, any such operation, in addition to being unlawful, would upset the carefully crafted rules designed to protect the primary, safety-of-flight AMT service. While it is unclear whether the Viraspex and PATH Comments are explicitly proposing outdoor/remote use of 2360-2390 MHz by MBANs, their Comments are at a minimum ambiguous on this point.

In conclusion, AFTRCC does not take issue with the Pilot program proposal, or the Commenters' support for it. On the contrary, the proposal is a laudable one. Rather, AFTRCC submits these comments in order to correct a possible misconception relative to Commission rules and policies that govern how MBANs can be deployed and operated outside of health care facilities.

Respectfully submitted,

/s/ Daniel P. McNeil

Daniel P. McNeil
President

[5] *Amendment of the Commission's Rules to Provide Spectrum for the Operation of Medical Body Area Networks*, ET Docket No. 89-59, First Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd 6422, 6432, para. 17 (2012), *recon. granted in part*, Order on Reconsideration and Second Report and Order, 29 FCC Rcd 10662 (2014).

AFTRCC Membership